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RAW SEQUENCE LISTING DATE: 01/27/2002  
PATENT APPLICATION: US/09/780,929 TIME: 15:28:18

Input Set : A:\MBHB00,884-H SequenceListing.txt  
Output Set: N:\CRF3\01272002\I780929.raw

3 <110> APPLICANT: Ribozyme Pharmaceuticals, Inc  
4 Breaker, Ronald  
5 Beigelman, Leo  
7 <120> TITLE OF INVENTION: Nucleic Acid Catalysts with Endonuclease Activity  
9 <130> FILE REFERENCE: MBHB00-884-H (500/001)  
11 <140> CURRENT APPLICATION NUMBER: 09/780,929  
12 <141> CURRENT FILING DATE: 2001-02-08  
14 <150> PRIOR APPLICATION NUMBER: US 60/181,360  
15 <151> PRIOR FILING DATE: 2000-02-08  
17 <160> NUMBER OF SEQ ID NOS: 126  
19 <170> SOFTWARE: PatentIn version 3.0  
21 <210> SEQ ID NO: 1  
22 <211> LENGTH: 28  
23 <212> TYPE: RNA  
24 <213> ORGANISM: Artificial Sequence  
26 <220> FEATURE:  
27 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
29 <220> FEATURE:  
30 <221> NAME/KEY: misc\_feature  
31 <222> LOCATION: (1)..(6)  
32 <223> OTHER INFORMATION: 2'-O-Methyl \_\_\_\_\_  
34 <220> FEATURE:  
35 <221> NAME/KEY: misc\_feature  
36 <222> LOCATION: (21)..(27)  
37 <223> OTHER INFORMATION: 2'-O-Methyl  
39 <220> FEATURE:  
40 <221> NAME/KEY: misc\_feature  
41 <222> LOCATION: (28)..(28)  
42 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
44 <400> SEQUENCE: 1  
  
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48 <210> SEQ ID NO: 2  
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51 <213> ORGANISM: Artificial Sequence  
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54 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
56 <220> FEATURE:  
57 <221> NAME/KEY: misc\_feature /  
58 <222> LOCATION: (1)..(5)  
59 <223> OTHER INFORMATION: 2'-O-Methyl  
61 <220> FEATURE:  
62 <221> NAME/KEY: misc\_feature

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64 <223> OTHER INFORMATION: 2'-O-Methyl
66 <220> FEATURE:
67 <221> NAME/KEY: misc_feature
68 <222> LOCATION: (28)..(28)
69 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative
71 <400> SEQUENCE: 2
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77 <212> TYPE: RNA
78 <213> ORGANISM: Artificial Sequence
80 <220> FEATURE:
81 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid
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89 <212> TYPE: RNA
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92 <220> FEATURE:
93 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid
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103 <223> OTHER INFORMATION: 2'-O-Methyl
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106 <221> NAME/KEY: misc_feature
107 <222> LOCATION: (28)..(28)
108 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative
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116 <212> TYPE: RNA
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123 <221> NAME/KEY: misc_feature
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125 <223> OTHER INFORMATION: 2'-O-Methyl
127 <220> FEATURE:
128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (23)..(27)

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130 <223> OTHER INFORMATION: 2'-O-Methyl  
 132 <220> FEATURE:  
 133 <221> NAME/KEY: misc\_feature  
 134 <222> LOCATION: (28)..(28)  
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 137 <400> SEQUENCE: 5  
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 151 <222> LOCATION: (1)..(4)  
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 160 <221> NAME/KEY: misc\_feature  
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 162 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
 164 <400> SEQUENCE: 6  
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 169 <211> LENGTH: 28  
 170 <212> TYPE: RNA  
 171 <213> ORGANISM: Artificial Sequence  
 173 <220> FEATURE:  
 174 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
 176 <220> FEATURE:  
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 179 <223> OTHER INFORMATION: 2'-O-Methyl  
 181 <220> FEATURE:  
 182 <221> NAME/KEY: misc\_feature  
 183 <222> LOCATION: (23)..(27)  
 184 <223> OTHER INFORMATION: 2'-O-Methyl  
 186 <220> FEATURE:  
 187 <221> NAME/KEY: misc\_feature  
 188 <222> LOCATION: (28)..(28)  
 189 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
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 195 <210> SEQ ID NO: 8  
 196 <211> LENGTH: 28

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Input Set : A:\MBHB00,884-H SequenceListing.txt  
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197 <212> TYPE: RNA  
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200 <220> FEATURE:  
201 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
203 <220> FEATURE:  
204 <221> NAME/KEY: misc\_feature  
205 <222> LOCATION: (1)..(6)  
206 <223> OTHER INFORMATION: 2'-O-Methyl  
208 <220> FEATURE:  
209 <221> NAME/KEY: misc\_feature  
210 <222> LOCATION: (20)..(27)  
211 <223> OTHER INFORMATION: 2'-O-Methyl  
213 <220> FEATURE:  
214 <221> NAME/KEY: misc\_feature  
215 <222> LOCATION: (28)..(28)  
216 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
218 <400> SEQUENCE: 8  
  
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223 <211> LENGTH: 28  
224 <212> TYPE: RNA  
225 <213> ORGANISM: Artificial Sequence  
227 <220> FEATURE:  
228 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
230 <220> FEATURE:  
231 <221> NAME/KEY: misc\_feature  
232 <222> LOCATION: (1)..(6)  
233 <223> OTHER INFORMATION: 2'-O-Methyl  
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237 <222> LOCATION: (12)..(12)  
238 <223> OTHER INFORMATION: 2'-O-Methyl  
240 <220> FEATURE:  
241 <221> NAME/KEY: misc\_feature  
242 <222> LOCATION: (21)..(27)  
243 <223> OTHER INFORMATION: 2'-O-Methyl  
245 <220> FEATURE:  
246 <221> NAME/KEY: misc\_feature  
247 <222> LOCATION: (28)..(28)  
248 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
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254 <210> SEQ ID NO: 10  
255 <211> LENGTH: 28  
256 <212> TYPE: RNA  
257 <213> ORGANISM: Artificial Sequence  
259 <220> FEATURE:  
260 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
262 <220> FEATURE:

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Input Set : A:\MBHB00,884-H SequenceListing.txt

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263 <221> NAME/KEY: misc\_feature  
 264 <222> LOCATION: (1)..(7)  
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 269 <222> LOCATION: (21)..(27)  
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 274 <222> LOCATION: (28)..(28)  
 275 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
 277 <400> SEQUENCE: 10

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 282 <211> LENGTH: 28  
 283 <212> TYPE: RNA  
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 286 <220> FEATURE:  
 287 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
 289 <220> FEATURE:  
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 292 <223> OTHER INFORMATION: 2'-O-Methyl  
 294 <220> FEATURE:  
 295 <221> NAME/KEY: misc\_feature  
 296 <222> LOCATION: (21)..(27)  
 297 <223> OTHER INFORMATION: 2'-O-Methyl  
 299 <220> FEATURE:  
 300 <221> NAME/KEY: misc\_feature  
 301 <222> LOCATION: (28)..(28)  
 302 <223> OTHER INFORMATION: n stands for inverted deoxyabasic derivative  
 304 <400> SEQUENCE: 11

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 309 <211> LENGTH: 28  
 310 <212> TYPE: RNA  
 311 <213> ORGANISM: Artificial Sequence  
 313 <220> FEATURE:  
 314 <223> OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid  
 316 <220> FEATURE:  
 317 <221> NAME/KEY: misc\_feature  
 318 <222> LOCATION: (1)..(6)  
 319 <223> OTHER INFORMATION: 2'-O-Methyl  
 321 <220> FEATURE:  
 322 <221> NAME/KEY: misc\_feature  
 323 <222> LOCATION: (18)..(18)  
 324 <223> OTHER INFORMATION: 2'-O-Methyl  
 326 <220> FEATURE:  
 327 <221> NAME/KEY: misc\_feature

Use of n and/or Xaa has been detected in the Sequence Listing.  
 Review the Sequence Listing to insure a corresponding  
 explanation is presented in the <220> to <223> fields of  
 each sequence using n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/780,929

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Input Set : A:\MBHB00,884-H SequenceListing.txt  
Output Set: N:\CRF3\01272002\I780929.raw

L:45 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
L:305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:801 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27  
L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28  
L:922 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29  
L:964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30  
L:1007 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31  
L:1049 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32  
L:1091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:1133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:1175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:1217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
L:1259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37  
L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38  
L:1338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:1385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40  
L:1432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41  
L:1479 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42  
L:1526 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43  
L:1578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44  
L:1620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45  
L:1667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1719 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47  
L:2360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100  
L:2362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100

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L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102